

CLAIMS

1. Method for determining the position of a rotationally drivable tool, having the following steps:
 - 5 - positioning a rotationally drivable tool (14) in the beam path of a measuring beam (18),
 - rotating the tool (14),
 - choosing a movement direction,
 - moving the tool (14) in the chosen direction, away
 - 10 from the measuring beam (18), to a measuring position in which the tool (14) is separated from the measuring beam (18),
 - detecting the measuring position for a position of the tool (14) in which the measuring beam (18) is not
 - 15 interrupted during at least one revolution of the tool (14), and
 - determining the position of the tool (14) from the measuring position.
- 20 2. Method according to Claim 1, in which the tool (14) is positioned in the beam path of the measuring beam (18) in such a manner that the measuring beam (18) is interrupted.
3. Method according to Claim 1 or 2, in which the
- 25 tool (14) is positioned in the beam path of the measuring beam (18) in such a manner that the measuring beam (18) is periodically interrupted by the rotating tool (14).
4. Method according to one of Claims 1 to 3, in which the
- 30 tool (14) is rotated at a predetermined rotational speed.
5. Method according to one of Claims 1 to 4, in which the tool (14) is moved at a predetermined velocity.

6. Method according to one of Claims 1 to 5, in which the tool position is determined in dependence on the rotational speed and the movement velocity of the tool (14).

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7. Method according to one of Claims 1 to 6, in which the moving of the tool (14) away from the measuring beam (18) is ended when the measuring position is reached.

10 8. Method according to one of Claims 1 to 7, in which the geometry of the tool (14) is determined from the measuring position.

9. Device for determining the geometry and position of a
15 rotationally drivable tool, having:

- a control system, and
- an optical measuring device (10, 12),
characterised in that

- the control system is designed and programmed to carry
20 out the method according to one of Claims 1 to 8.

10. Device according to Claim 9, characterised in that the optical measuring device (10, 12) has a transmitter (10) for emitting a measuring beam (18) and a receiver (12) for
25 selectively receiving the measuring beam (18).